BRUHAT BANGALORE MAHANAGARA PALIKE

Project: Construction of Fencing to Swimming pool at Allalasandra Lake premises in Ward No.04 Yelahanka New Town

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
1	KSRRB M200-13.1. Dismantling of existing structures like culverts, Bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceble material and stacking the serviceble material with all lifts complete as per specifications. II. By mechanical means, A. Cement concrete Grade M-15 & M-20 (P.No.136, I.No.18.20 of PW,P&IWTD SR 2016-17)								
	Grill								
	For Column Post		44.00	0.45	0.45	0.90	8.02		
							8.02	365.70	**2932.91**
2	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neately dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.142, I.No.19.1 of PW, P&IWTD SR 2016-17)								
	Grill								
	Main Gate to 2nd MS panel gate		1.00	92.00	1.10	1.00	101.20		
	2nd MS Panel gate to 3rd gate		1.00	20.00	1.10	1.00	22.00		
	Main gate to Bund		1.00	55.00	2.00	2.00	220.00		
	Column Post								
	columns in solid block		30.00	1.50	1.50	1.50	101.25		
	2nd MS Panel gate to 3rd gate		7.00	1.50	1.50	1.50	23.63		
	For chainlink remaining portion		1.00	150.00	0.60	0.80	72.00		
							540.08		
	Deduct SSM Qty at column post		30.00	1.10	1.10	0.60	21.78		
							518.30	186.92	**96880.64**
3	KSRB 4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.2 of PW,P&IWTD S.R 2016-17)								
	Bed Concrete	Cum							
	Grill								
	Main Gate to 2nd MS panel gate		1	92.00	1.10	0.15	15.18		
	2nd MS Panel gate to 3rd gate		1	20.00	1.10	0.15	3.30		
	Main gate to Bund		1	55.00	2.00	0.15	16.50		
	Column Post								
	columns in solid block		30.00	1.50	1.50	0.15	10.13		
	2nd MS Panel gate to 3rd gate		7	1.50	1.50	0.15	2.36		
	For chainlink remaining portion		1	150	0.6	0.15	13.50		
	Deduct SSM Qty at column post		-30.00	1.10	1.10	0.15	-5.45		
							55.52	5348.76	**296963.16**
4	KSRB 4-6.1 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour complete as per specificaitons. Specification No. KBS 4.6.2(Page No : 15, item No : 4.28)								
	Column Post								
	columns in solid block		30.00	3.60		0.30	32.40		
	2nd MS Panel gate to 3rd gate		7	3.60		0.30	7.56		
	For Plinth beam below Solid Block(compd wall)		2	155.00		0.45	139.50		
							179.46	244.86	**43942.58**
5	KSRB 4-6.5 : Providing and removing centering, shuttering, strutting, propping etc., for columns, pillars, post and struts, square / rectangular/ polygon in plan including cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 (Page No : 16, item No : 4.32)								
	Column Post								
	Column post at Swimming Pool		44	1.80		0.90	71.28		

Sl.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
	Column Super str								
	columns in solid block		30	1.20		3.00	108.00		
	2nd MS Panel gate to 3rd gate		7	1.20		3.00	25.20		
							204.48	**387.96**	**79330.06**
6	KSRB 4.2.2 : Providing and laying in position reinforced cement concrete of Design mix M20 with OPC cement @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregtes @ 0.460 cum, with super plasticisers @ 3 liters confirming to is 9103-1999 reafirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedastals, retaining walls, return walls, walls (any thickness) including attached pilasters, columnspillars, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1, 4.6 (Page No : 13, item No : 4.11 of PW,P&IWTD S.R 2016-17)								
	Column post at Swimming Pool		44.00	0.45	0.45	0.90	8.02		
	Footing								
	Main Gate to 2nd MS panel gate		30.00	1.50	1.50	0.45	30.38		
	2nd MS Panel gate to 3rd gate		7.00	1.50	1.50	0.45	7.09		
	Column Super str								
	Main Gate to 2nd MS panel gate		30.00	0.30	0.30	3.00	8.10		
	2nd MS Panel gate to 3rd gate		7.00	0.30	0.30	3.00	1.89		
	For Plinth beam below Solid Block(compd wall)		1.00	155.00	0.30	0.45	20.93		
	Concrete for grill embedment		10.00	0.50	0.45	0.45	1.01		
							77.41	6371.66	**493230.20**
7	KSRB - 4.9.2: Providing TMT steel reinforcement Fe500 for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3. (P.No.17, I.No.4.46.2 of PW, P&IWTD SR 2016-17)								
	Consider 100Kgs/cum for only RCC column footing Qty	Tonne		76.40	0.100	--	7.64		
							7.64	64243.42	**490819.73**
8	KSRB 5.2-3: Providing and constructing granite size stone masonry in foundation cement mortor 1:6, stone hammered dressed in courses not less than 20cms high, bond stones at 2m. apart in each course including cost of materaials, labour, curing complete as per specifications. Specifcation No. KBS 5.1.13.(P.No.23, I.No.5.6 of PW, P&IWTD S.R 2016-17)							-	
		Cum							
	Grill								
	Main Gate to 2nd MS panel gate		1	92	0.6	0.45	24.84		
	2nd MS Panel gate to 3rd gate		1	20	0.6	0.45	5.40		
	Main gate to Bund		1	55	1.2	0.45	29.70		
							59.94		
	Deduct RCC column		37.00	0.30	0.30	0.30	1.00		
							58.94	4438.22	**261588.69**
9	KSRB 5.3-3 : Providing and constructing granite / trap / basalt size stone masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13(P.No.23, I.No.5.6 of PW, P&IWTD S.R 2016-17)								
		Cum							
	Grill								
	Main Gate to 2nd MS panel gate		1	92	0.45	0.45	18.63		
	2nd MS Panel gate to 3rd gate		1	20	0.45	0.45	4.05		
	Main gate to Bund		1	55	0.45	0.45	11.14		
	For chainlink remaining portion		1	150	0.45	0.7	47.25		
							81.07		
	Deduct RCC column		37	0.3	0.30	0.3	1.00		

Sl.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
							80.07	5305.30	**424795.37**
10	KSRB 15.1.1 Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. (P.No.113, I.No.15.1 of PW, P&IWTD S.R 2016-17)								
		Sqm							
	Grill								
	Main Gate to 2nd MS panel gate		2.00	92.00		0.45	82.80		
	2nd MS Panel gate to 3rd gate		2.00	20.00		0.45	18.00		
	Main gate to Bund		2.00	55.00		0.45	49.50		
	For chainlink remaining portion		2.00	150.00		0.70	210.00		
							360.30		
	Deduct RCC column		74.00	0.50		0.90	**33.30**		
							327.00	102.82	**33622.14**
11	KSRB 4-1.6: Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.530 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.6 of PW,P&IWTD S.R 2016-17)								
	Coping	Cum							
	Grill								
	Main Gate to 2nd MS panel gate		1.00	92.00	0.20	0.10	1.84		
	2nd MS Panel gate to 3rd gate		1.00	20.00	0.20	0.10	0.40		
	Main gate to Bund		1.00	55.00	0.45	0.10	2.48		
	For chainlink remaining portion		1.00	150.00	0.45	0.10	6.75		
							11.47		
	Deduct RCC column		37	0.30	0.30	0.10	0.33		
							11.14	5767.46	**64249.50**
12	KSRB 5-14: Providing and constructing precast concrete solid blocks with compressive strength not less than 3.5 Newton with cement mortar 1:4 masonry (quoin, Jamb, closer blocks) with solid concrete blocks of size 40x15x20cms conforming to I.S. 2185 of 1965 in superstructure including cost of materials, labour charges, scaffolding, curing complete as per specifications(Page No.25, Item No. 5.26.2)								
	Main Gate to 2nd MS panel gate		1.00	92.00		3.00	276.00		
	2nd MS Panel gate to 3rd gate		1.00	20.00		3.00	60.00		
	Deduct RCC column		-7.00	0.30		3.00	-6.30		
							329.70	961.42	**316980.17**
13	KSRB15-3.12 :Providing 20mm thick cement plaster in single coat with cement mortar 1:6, to stone masonry & concrete surface including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications.(Page No.114, Item No.15.20 of SR 2016-17)								
	Main Gate to 2nd MS panel gate		2	92.00		3.00	552.00		
	2nd MS Panel gate to 3rd gate		2	20.00		3.00	120.00		
	Deduct RCC column		-14.00	0.30		3.00	-12.60		
							659.40	220.48	**145384.51**
14	KSRB 15-16.1 : Providing and finishing external walls in two coats with waterproof cement paint of approved brand and shade to give an even shade after throughly brooming the surface to remove all dirt and loose powdered material, free from mortar drops and other foreign matter cost of materials, labour, complete as per specifications. - with primer. (P. No. 118, I.No. 15.53.2 of SR 2016-17).								
	Main Gate to 2nd MS panel gate		2	92.00		3.00	552.00		
	2nd MS Panel gate to 3rd gate		2	20.00		3.00	120.00		
	Deduct RCC column		-14.00	0.30		3.00	-12.60		
							659.40	89.04	**58712.98**

Sl.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
15	Fabricating, providing and erecting in poiston of MS Hot dip galvanised Sq. Hallow Poles of 132X132 Heavy gauge of length 3000mm with MS. Hot dip Galvanised grill work as per approved design and drawing of chief architect. Using 12X75mm galvanised flat for alround frame and 20X20mm galvanised forged design with squarefor vertical at 150mmC/C as shown in the drawing including providing forged ornamental arrowhead at top and bottom. The work is inclusive of throughing flat, square rods, placing welding all the joints, including grinding, finishing 2 coats of anticorrosive paint over one coat of metal primer. The rate is inclusive of all materials li MS. Hollow galvanised pipe, flats, forged square rods, cost of labour for all items of work cost painting, welding, cutting, grinding with all lead and lift as per specification including loading and unloading with cost and conveyance of all materials, labour, machinery and incidental charges for the successful completion of the work as per the direction of the engineer-in-charge of the work (Data Rate)								
	Grill	Kg							
			At 35kg/sqm						
	Main gate to Bund		1	55.00	1.50		82.50		
	samll gate to bore well		1	7.00	1.50		10.50		
							93.00	8974.81	**834657.14**
16	Fabrication supplying and erecting M.S. tubular trusses of all spans as per approved drawing & design with prefabricated steel applications using quality material and are durable, reliable and corrosion and abrasion resistant. Welding shall confirm to latest structural welding code. Quality shall be on various parameters like shape, size, design gauge and polish. The entire trusses is anchored in RCC column by using 4 nos of M.S. anchor bolts at each support with 10mm thick base plate and shoe piate. The work includes cutting, straightening placing in position of M.S. pipes and welding wherever necessary and applying one coat of redoxide primer coat to all the members including cost of all materials, labour charges, and hire charges of machineries for cutting, welding, grinding and erection equipments, with all lead and lift, transportation, letc., complete as per specification(P.No.40, I.No7.29 of PW,P&IWTD S.R 2016-17))								
	SHS150X150X6mm	kgs	nos	kg/m	length				
	Column post at Swimming Pool		44	26.40	3.00		3484.80		
	for grill		45	26.40	3.80		4514.40		
	L Angles	4	89	1.80	0.70		448.56		
							8447.76	116.60	**985008.82**
17	Fabricating, Providing and Errecting in position Hot Dip Galvanised gate Using 72X72X4.8mm square GI pipe frame with top pipe Bending in heavy duty Hydraulic press with sand packing and hot bending to form double arch as per drawing profile , 20mm hot dip galvanised sq rod for verticals at 150mm C/C as shown in the drawing including providing hot dip galvanised forged ornamental design in between sq roads and heads at top , middle, bottom. intermediate supports of 75X12mm and 50X6mm arch bend to hot dip galvanised flats the work is inclusive of throughing GI flat Gi square rods, placing , welding all the joints including grinding , finishing metal puuty , painting two coats enamel painting . the rate is inclusive of all materials like GI square pipe GI Square rods GI froged Designs etc Heavy duty Hinges are made out of 75mm soild SQ. Block assembled wit 20mm dia bearing in 3 Places for each flop Heavy duty locking arrangements at tow places including cost of labour painting errecting charges using hoist pulley cranes with all lead and lift , loading, transportation, unloading, scaffolding charges and all other incidental charges for successful completion of the work as per directions of the engineer - in - charge of the work (Data Rate)								
	for gate	sqm							
			1	6.70	3.00		20.10		
							20.10	12244.01	**246104.54**
18	Providing and fixing M.S. Gate as per Chief Architect Drawing, using 50mm x 50mm 14 guage M.S. hollow pipe frame work bent to ornamental shape as shown in the drawing and 35mm x 6mm and 16 x 16mm Square rods for verticals alternatively spaced at 4cms c/c in two halves and 40mmx6mm M.S. flats for horizontal member and at the top cast iron spikes are provided at alternate vertical members as shown in the drawing etc., complete. All the steel surface should bethoroughly cleaned free of rust and painted with anti corrosive paint (shop paint) etc., complete. The work includes cost of all materials, labour charges for all items of work, hire charges for welding, cutting and grinding equipment, and electricity charges, with lead and lift, loading and unloading charges, etc., complete as per specification(P.No.42, I.No7.37 of PW,P&IWTD S.R 2016-17))								
	for gate	sqm							

Sl.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
			2	3.80	3.00		22.80		
			1	1.20	1.50		1.80		
							24.60	3110.04	**76506.98**
19	KSRRB M800-7. Painting:-Providing and applying two coats of ready- mix paint of approved brand after through cleaning of surface to give an even shade complete as per specifications. MORTH Specification No. 803 Painting on Steel Surface(P.No.184, I.No24.8.1 of PW,P&IWTD S.R 2016-17))								
	For Posts of Grill	Sqm							
	For gate		2	3.8	3.0		22.80		
			1	1.2	1.5		1.80		
							24.60	60.42	**1486.33**
20	PROVIDING TRAPEZOIDAL PROFILED SHEET Providing and installing of pre painted Galvolume iron Trapezoidal profiled sheet of approved make 1060 mm width (1000 mm cover width), 28-30 mm crest height with crest distance of 200 mm c/c with 2 ribs at the centre for stiffening. The total coated thickness (TCT) of the sheet will be 0.47 mm +/- 0.02 mm tolerance Zinc-Alu Alloy coating AZ150 gsm as per ASTM 1397/A755-550 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 20-22 microns using self drilling/self tapping screws of 25 mm length, to be fixed over the existing purlins, rafters, channels and trusses.(Page No : 300, item No : 38.30)								
	At Swimming Pool	Sqm							
			1	110.00	3.00		330.00		
							330.00	**816.20**	**269346.00**
21	KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300- 2 complete as per specifications, (which includes cost of gravel / murrum, watering charges & compaction by vibratory roller) MORTH Specification No. 305 (P.No.148, I.No.19.60 of PW,P&IWTD S.R 2016-17)								
	Filling	Cum							
	Near Ashwath Katte to main gate		1.00	100.00	50.00	2.80	14000.00		
	Parking side Embakment		1.00	95.00	50.00	3.00	14250.00		
							28250.00	320.12	**9043390.00**
22	Supplying and fixing M.S. Rectangular poles made out of 2 equal angles of 65x65x6 mm welded together and fixed in CC (1:2:4) WITH 2 NOS 16mm dia M.S. hold fast rods each of length 25 cms. Including cost of all materials cutting, bending scaffolding wherever necessary, nicely finishing the welded joints with all lead lifts and as per the directions of the Engineerin - charge of the work and including providing 2 coats of approved quality paint over one coat of shop painting (excluding cost of earthwork and concrete) (P.No.262 I.No.37.2 of PW,P&IWTD SR of 2016-17)								
	Chain Link Fancing	m							
	for remaining portion		56	2.50	--	--	140.00		
							140.00	868.14	**121539.60**
23	Providing chain link fencing 50mm size of 8 guage properly stretched between existing rectangular poles and fixed with suitable bolts & nuts, the free ends shall be welded to the pole and block pipe at top and bottom as required including cost of all materials, labour, lead and lifts and as per the directions of the Engineer-in-charge of work including two coats of approved quality paint over one coat of shop paint (P.No.262 of I.No.37.3 in PW,P&IWTD S.R 2016-17)								
	Chain Link Fancing	Sqm							
	for remaining portion		1	150.00	--	2.00	300.00		
							300.00	698.54	**209562.00**
24	Providing and fixing M.S. Block pipe of 38mm dia, of heavy guage of 14 including removing the bends, cutting the pipe, and fixing pipe in between the existing two verticle poles (M.S. rectangular poles) and spot welding the chain link with M.S. block pipe including cost of all materials wastage in cutting, and scaffolding wherever necessary with all lead and lift as directed by the Engineer-in-charge of work etc., complete including two coats of approved quality paint over one coat of shop paint. (P.No.262 I.No.37.4 of PW,P&IWTD SR of 2016-17)								
	Chain Link Fancing	m							
	for remaining portion		2	150.00	--	--	300.00		
							300.00	343.44	**103032.00**

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Sl.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
								Total Construction Cost	14700066.05
25								Cost towards Preparation of DPR LS	147001.00
26								Cost towards PMC / Third Party inspection LS	147001.00
								Sub Total	14994068.05
27								Miscellaneous and rounding off	5931.95
								Total	15000000.00

Certificate.

1 The workspot was inspected and work is found to be necessary.
2 The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3 The rates adopted based on the PWD SR, Bangalore circle for year 2016-17.
4 The provisions made in the estimate are necessary and essential.

Assistant Engineer

Assistant Executive Engineer
Project Division, Yelahanka Zone

Executive Engineer
Project Division,
Yelahanka Zone, BBMP

Assistant Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Executive Engineer
Project Division
Yelahanka Zone
Bangalore
9/x/17

Administrative Approval

Accorded For 150.00 lakhs
Head of A/C P0290
CER NO :124 Dt:15/2/18

E.E. (Project)

Technical Sanction

Accorded For 150.00 lakhs.
Head of A/C P0290
CER NO :244 Dt:10/10/17

TA

CE (YNK)